Obstacles on footpaths in the CBD
Problem statement & survey design

City of Melbourne
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PROBLEM STATEMENT
People can be observed overflowing the footpaths in the CBD

In some parts of the CBD, at some times of day, people are walking on the road

Bourke Street at Spencer Street
William Street at LaTrobe Street
Spring Street at Collins Street
especially near railway station exits.

Video  
Flagstaff Station  
William Street south of LaTrobe Street  
23 October 2018  
0853

Video  
Parliament Station  
Spring Street north of Collins Street  
8 November 2018  
0825
This means the footpaths will have to be made wider

- People walking on the road is significant problem.
  - The immediate risks include road trauma
  - The longer term risks include constraints on the City economy, liveability and equity
- Overflow in some locations suggests that other sites are congested – just not to the level that means people walk on the road.
  - Congested footpaths bring other risks such as compromising access for people with wheels (DDA, small children) and time lost in delay
- These problems are likely to get worse as the number of people in the CBD increases.
- Responding to increasing population in a fixed space is a ‘macro’ problem that requires a strategic response.
- One obvious strategic response is to widen the footpaths to cope with the increased flow.
- Widening the footpaths in the CBD will be a costly, slow and incremental process.
  - Footpath widening projects will cost millions of dollars.
  - The designs will take time. Plans will require cross disciplinary consensus and public consultation will need to be extensive.
  - Although templates can be developed, effective and appropriate solutions will need to be tailored to each block or precinct.
  - Although the solutions will provide immediate local relief they will have no impact on other areas.
What can be done in the meantime with smaller amounts of money (and effort)?

- As the strategic response will be slow, a tactical response is needed in the short term.
- Effective tactical responses require a diagnosis.
- This project aimed to identify the immediate and local causes of footpath congestion.
- This will enable the Council to design policies and interventions that maximise the effective capacity of the existing footpaths where flows are high.
to remove (or reduce) obstacles on the footpaths

• Other cities are concerned about similar issues. In London the problem is discussed using the term ‘clutter’
• This term combines concepts of:
  – Untidy, poorly organised, dis-orderly
  – Unwanted or unnecessary
  – Too many
  – Occupying space for little return
  – Redundant/obsolete
• The term ‘clutter’ is problematic:
  – It is a collective term (uncountable noun) which is hard to apply to a specific object. (This object is a clutter, this one is not).
  – The word contains competing meanings. (Objects could be ‘tidied’ to reduce clutter when ‘removal’ is more appropriate.)
  – The word is used in two domains ‘visual clutter’ and ‘physical clutter’.
• Rather than refer to ‘clutter’ this investigation looked for ‘obstacles’.
• Obstacle is:
  – A countable noun
  – ‘An obstacle is an object that makes it difficult for you to go where you want to go, because it is in your way.’
• Nothing is intrinsically ‘an obstacle’ it depends on its location.
  – Redundant, unnecessary obstacles can be removed
  – Necessary items that are also obstacles can be consolidated, redesigned or relocated
  – Positive items can also be obstacles. ‘This tree is an obstacle’.
• People can be obstacles for example when they are waiting for a bus
The nature of the problem is not well defined

- Formal responses to avoid or remove ‘clutter’ in London (and Australia) have tended to be restricted to moving or removing ‘street furniture’ such as pedestrian fences and seats.

- This definition is too narrow as people, temporary items and more permanent items also act as obstacles.

Public debate and Council responses have recently focused on items that are not ‘street furniture’ including:

- People queueing for iPhones (City of Sydney)
- Dockless bicycles
- NBN node cabinets (City of Sydney)
This makes it difficult to develop and implement policies & interventions

Recommendations in the City Space Discussion Paper for the Transport Strategy Refresh include:

- Relocating all bicycle parking (privately-owned and shared services) and motorbike parking from the footpath
- Limiting:
  - The use of portable advertising boards
  - Busking
  - Counter style shop fronts to avoid queues
- Removing redundant items such as street furniture
- Rationalising signage and other objects
- Establishing controls based on:
  - Day of week
  - Time of day
  - Location
  - Number of pedestrians
  - Width of footpath

In January, Mr Keegan said the city council intended to address the issue of unlicensed street clutter. The Restaurants Association of Ireland at the time accused him of going on an “anti-tourism rampage”.
SURVEY DESIGN
A method was needed to identify the problem & inform tactical decisions.

Transport for London’s Pedestrian Comfort Guide (PCG) & Pedestrian Environment Review (PERS) were considered. Computer modelling is also possible.

ARUP used Oasis computer modelling in the design of AAMI Park to ensure ‘optimal external circulation for patrons, improving safety and avoiding bottlenecks around the concourse and in surrounding streets’.
PBA developed a footpath obstacle survey based on three variables

<table>
<thead>
<tr>
<th>Aim</th>
<th>Method</th>
<th>Strengths</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Comfort Guidance TFL</td>
<td>‘Identify priorities for action or attention, the cause of these issues and help to identify mitigation measures to make the site more comfortable.’</td>
<td>Measure: • People per minute • Width of path • By location for example ‘Tourist Attraction’</td>
<td>• Identifies constrained sites – pinch points • Quantifies flow and width</td>
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<tr>
<td>Pedestrian Environment Review TFL</td>
<td>‘Generate quick-win work list’</td>
<td>Visual survey including: • Width • Dropped kerbs • Gradient • Permeability • Legibility • Lighting • Tactiles • Personal security • User conflict</td>
<td>• Many criteria • Mapped on heat map and bar charts • Supports pedestrianisation and shared space schemes</td>
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<tr>
<td>Footpath obstacle survey</td>
<td>Identify locations where flow is high. Identify the nature of the obstacles in the flow.</td>
<td>Visual survey: • Identify level of flow at peak times A. At intersections B. Along blocks • Identify obstacles 1. People 2. Temporary items 3. Lightly fixed objects 4. More permanent objects • Record location</td>
<td>• Quick, low cost scan across much of Hoddle Grid • How much and where are the flows higher than the capacity • What is getting in people’s way? • Mapped on heat map and bar charts</td>
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</table>
1 How strong are the flows along blocks and across intersections?
2 What obstacles are in the way?

- People
- Lightly-fixed objects
- Temporary objects
- More permanent objects
3 Where are the problems of high flow and obstacles
Definitions

• Definitions of flow were set for blocks and intersections
  • Flow along Blocks was rated:
    – 1 Comfortable walking
    – 2 Uncomfortable walking
    – 3 Walking on the kerbstone
    – 4 People walking on the road in one direction
    – 5 People walking on the road in both directions
  • Flow across intersections was assessed by:
    – Flow – people walking inside or outside the crossing area
    – Storage – whether people were waiting inside or around the poles on the footpath
    – Obstructions – the number of poles in the pedestrian ramps
• Photographs of these definitions are provided below

• The categories of obstacles were defined based on observation and information from City of Melbourne staff. Four categories were used:
  – People. People getting in the way of other people
  – Temporary objects. Objects that are not attached to anything and that could be moved or picked up
  – Lightly-fixed objects. Objects fixed to the ground or other objects that could be removed with tools.
  – Major fixed objects. Objects that were strongly connected by cables, wires or roots.
• On the forms sub categories were suggested in each category and open responses were available
• Photographs of these potential obstacles in their categories are provided below.
Data collection

• The surveys were conducted 23 – 31 October 2018 in the central city.
  – The survey avoided areas affected by a public demonstration on 22 October.
• The surveys took place at times of high flow.
  – AM peak (0730 – 0930)
  – Lunchtimes (1200 – 1400).
• The surveys took place in locations where high flow has been observed by City of Melbourne.
  – A map was marked up by parking inspectors and other staff indicating areas were pedestrian flows around obstacles had been observed.
  – The AM peak surveys were based around main roads and railway stations.
  – The lunchtime surveys included several ‘Little’ streets.
  – There was some overlap between the two areas.
• Data was collected by photographs and online forms linked to GPS data.
• Only obstacles were recorded
  – An object was recorded as an ‘obstacle’ if a pedestrian deviated from their path around the object. Motorcycles parked on the footpath (for example) were not recorded as obstacles if they did not cause deviation.
• Only ‘types’ of obstacles were recorded
  – The survey did not record the number of obstacles or how many times a particular object was observed to be an obstacle in each block.
• The surveyors moved from block to block (rather than observing one block for the whole period). As a result:
  – Not all peaks were observed
    • Some peaks have had been observed were not found at the survey time. The Level 5 flows filmed on blocks near Parliament and Flagstaff Stations were not observed during survey time.
  – Not all objects that are obstacles were observed
    • For example some of the bus stop structures which have been observed to be obstacles were not found to be obstacles at the time the survey
CATEGORIES USED IN THE SURVEY
FLOW ALONG BLOCKS WAS RATED FROM 1 - 5
1 Comfortable walking – some movement, plenty of room
2
Uncomfortable walking
3 Walking on the kerbstone
4
Walking on the road – one way
5 Walking on the road – both directions
INTERSECTIONS WERE RATED FOR OBSTRUCTIONS, STORAGE & FLOW
Low flow: People are walking inside the crossing area
High flow: People are walking outside the crossing area
Unobstructed pedestrian ramp: No pole in ramp
Obstructed pedestrian ramp: Pole in the pedestrian ramp
Low storage: No people waiting outside poles and other objects
High storage: People waiting outside poles and other objects
PEOPLE AS OBSTACLES
Walking area narrowed by people – collection money
Walking area narrowed by people collecting money
Walking area narrowed by people talking, waiting, smoking...

(‘Static activity’ TFL)
Walking area narrowed by people wheeling things
‘Can be picked up or moved immediately’

TEMPORARY OBJECTS THAT ARE OBSTACLES
Walking area narrowed by loose rubbish
Walking area narrowed by rubbish bins
Walking area narrowed by trading

Café screen (no café), Café chairs and table (no people), Café chairs and tables with people
Walking area narrowed by café tables
Walking area narrowed by A-boards
Walking area narrowed by messages to motorists
Walking area narrowed by risk alerts or water barriers
Walking area narrowed by footpath or other repairs
Walking area narrowed by freight
Walking area narrowed by personal effects
Walking area narrowed by parked motorbikes
Walking area narrowed by four-wheel vehicles
Walking area narrowed by terror blocks (and sign)
Needs a grinder or tools to remove the item – could be removed over the weekend

LIGHTLY FIXED OBJECTS THAT ARE OBSTACLES
Walking area narrowed by rubbish bins
Walking area narrowed by post box or telephone
Walking area narrowed by bus shelters
Walking area narrowed by informally parked bicycles
Walking area narrowed by bicycle racks (no bicycles) and formally parked bicycles
Walking area narrowed by signs
Walking area narrowed by bollards
Walking area narrowed by moveable planters
Walking area narrowed by poles
Walking area narrowed by kiosks (in use & disused)
Walking area narrowed by seats
MAJOR FIXED OBJECTS THAT ARE OBSTACLES

Difficult to move due to cables or roots – would take a month to move it
Walking area narrowed by poles, traffic control boxes, pillars
Walking area narrowed by Art
Walking area narrowed by trees
Walking area narrowed by hoardings or construction
OBSTACLES THAT WERE OBSERVED DURING THE SURVEY BUT NOT EVALUATED
Walking area narrowed by setbacks
Walking area narrowed by unnecessary fences
Walking area narrowed by vehicles across intersections
Obstacles in combination

- Truck parked in garage entrance
- VMS board
- Ute parked mostly on private land
- Plastic bollard
- Road work alert
- Motorcycle
- Phone box
- Rubbish bin
- Bicycle
- Poles
Walking area narrowed by lack of footpath